

REMARKS

1. Status of claims

After entry of the above amendment, claims 1-3, 7-23, 26-44, 46-51, 54-62, and 65-78 are pending and currently under consideration. Claims 4, 8, 23, 27, 51, and 73 are withdrawn from consideration.

2. Claim rejections under 35 U.S.C. §112

The Examiner rejected claims 4, 23, 51, and 62 under 35 U.S.C. §112, second paragraph, as being indefinite. Specifically, the Examiner alleged the species recited by these claims lacked antecedent basis in their parent claims.

By the above amendment, the parent claims now provide antecedent basis for the species recited by claims 4, 23, 51, and 62. Thus, Applicants respectfully request this rejection of claims 4, 23, 51, and 62 be withdrawn.

3. Claim rejections under 35 U.S.C. §102

The Examiner rejected claims 60-61 and 68-71 as being anticipated by Gauthier et al., U.S. Pat. No. 6,313,241 ("Gauthier '241"). Specifically, the Examiner alleged that Gauthier '241 discloses "numerous examples of ethylene/vinyl cyclohexene copolymers in their Examples" and "that films were co-extruded with the polymers in column 24 lines 24-25 to laminate the polymers with materials such as inherently oxygen barrier polymers such as ethylene vinyl alcohol in Example 37." Office Action dated April 23, 2004, p. 3. Applicants respectfully traverse this rejection.

Gauthier '241 teaches films comprising (i) a layer of EVCH, which is an oxygen scavenging material, and (ii) a layer of EVOH, which is an oxygen barrier material (Examples 34-41). In some of the films, the layers (i) and (ii) are directly adjacent, and in others, the layers (i) and (ii) have one or more additional layers interposed therebetween.

Claim 60, the independent claim from which currently rejected claims 61 and 68-71 depend, recites "a method of forming an oxygen barrier layer in a packaging article, comprising: providing an oxygen barrier composition comprising an oxygen barrier polymer and an oxygen scavenging polymer . . . forming the composition into the packaging article or an oxygen barrier layer thereof." One embodiment disclosed in the specification defines the "oxygen barrier layer" as "a layer comprising a blend of the oxygen barrier polymer and the oxygen scavenging polymer" (p. 5, lines 13-17). Thus, a single layer of the packaging article (which may be a single layer or a multilayer packaging article) may comprise both an oxygen barrier polymer and an oxygen scavenging polymer.

Gauthier '241 does not teach the invention claimed in Claim 60. The examples of Gauthier '241 comprise a layer consisting of EVOH and a separate layer consisting of EVCH, not an oxygen barrier composition comprising an oxygen barrier polymer and an oxygen scavenging polymer. The Examiner states "that films were co-extruded with the polymers in column 24 lines 24-25 to laminate the polymers with materials such as inherently oxygen barrier polymers such as ethylene vinyl alcohol." Office Action dated April 23, 2004, p. 3. Applicants' invention does not feature lamination of two polymer layers together; therefore, Applicants respectfully submit that Gauthier '241 does not teach every element of claim 60, from which claim the other rejected claims 61 and 68-71 depend. Applicants request this rejection of claims 60-61 and 68-71 be withdrawn.

4. *Claim rejections under 35 U.S.C. §103*

The Examiner rejected claims 1-3, 12-22, 31-44, 46-51, 60-62, and 65-71 under 35 U.S.C. §103(a) as being unpatentable over Gauthier et al., U.S. Pat. No. 6,143,197 ("Gauthier '197"). Specifically, the Examiner states that Gauthier '197 "Example 1 and Example 2 disclose production of ethylene/vinylcyclohexene films. The vinyl cyclohexene polymers may be combined with barrier polymer column 7 line 35. The polymers are disclosed to be oxygen scavenging and may contain a metal catalyst at column 8 lines 10-16. Photo initiators may be added such as those of applicants at column 6 lines 1-30." Office Action dated April 23, 2004, p.

3. The Examiner alleges these teachings could be combined to arrive at the presently claimed invention. Applicants respectfully submit that this is not a proper rejection under 35 U.S.C. §103 as it represents "obvious to try" reasoning; therefore, Applicants respectfully traverse this rejection of claims 1-3, 12-22, 31-44, 46-51, 60-62, and 65-71 and request that it be withdrawn.

Gauthier '197 indicates that an oxygen scavenging polymer may be diluted with another polymer and lists potentially desirably properties for the diluent polymer. Gauthier '197 additionally makes the broad statement that "the selection of the polymeric diluent largely depends on the article to be manufactured and the end use thereof Certain polymers are known to provide clarity, cleanliness, barrier properties, mechanical properties and/or texture...." See Gauthier '197, col. 7, lines 31-35. However, Gauthier '197 does not provide any further guidance or instruction as to criteria or specific objectives for selecting barrier properties from the listed properties. Furthermore, Gauthier '197 does not provide any indication or guidance regarding what specific type of barrier properties are desirable. For example, potentially desirable barrier properties may include gas barrier properties (e.g., a barrier to one or more

gases including CO₂, O₂, N₂, and water vapor, among others), moisture barrier properties, or light barrier properties, among others. Gauthier '197 does not teach selection of the barrier polymer, therefore a skilled artisan would first have to select a barrier polymer from the list of desirable diluent polymers of Gauthier '197 and then, with no guidance from Gauthier '197, select a polymer with an oxygen barrier property as the subject of further research before arriving at the current invention.

Finally, the Examiner admitted "there are no specific examples containing barrier polymer as well as applicants' specific oxygen scavenging polymer . . ." In addition, Gauthier '197 provides no working example of any composition comprising both an oxygen scavenging polymer and a diluent polymer.

For these reasons, Applicants request this rejection of claims 1-3, 12-22, 31-44, 46-51, 60-62, and 65-71 be withdrawn.

Claims 4, 23, 51, and 62 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Matthews et al., U.S. Pat. No. 6,254,804 ("Matthews"). Specifically, the Examiner states that "Matthews et al. disclose compositions containing polymers with barrier properties such as polyethylene terephthalate . . . in combination with polymers such as oxygen scavenging polymers . . . which are polyesters derived from 3-cyclohexen-1,1-dimethanol" . . . but that "no examples exist of applicants' combination of materials." Office Action dated April 23, 2004, p. 4. Applicants respectfully submit that the rejection is based on an improper "obvious to try" argument and respectfully request that the rejection be withdrawn.

Like Gauthier, Matthews provides a list of potentially desirable properties for a diluent polymer, including a barrier property; however, a barrier property is only one of many

potentially desirable properties. Furthermore, Matthews does not provide any indication or guidance as to the criteria or specific objectives for selecting barrier properties from the listed properties nor any guidance for selecting a specific barrier property (e.g. gas barrier, moisture barrier, etc.) that one would find desirable. Additionally, Mathews provides no discussion of regarding different gas barrier properties which may be desirable, e.g., CO₂, O₂, N₂, and water vapor, among others. Thus, a skilled artisan would first have to select a barrier polymer from the list of desirable diluent polymers of Mathews and then, with no guidance from Mathews, select a polymer with an oxygen barrier property for the subject of further research before arriving at the current invention.

For these reasons, Applicants respectfully request that the rejection of claims 4, 23, 51, and 62 be withdrawn.

The Examiner rejected claims 4, 23, 51, and 62 under 35 U.S.C. §103(a) as being unpatentable over Ching et al., U.S. Pat. No. 6,454,965 ("Ching").

Ching, filed March 24, 1999, and issued September 24, 2002, qualifies as prior art under 35 U.S.C. §102(e). Both the present application and Ching were owned by the same entity as of the filing date of the present invention (June 16, 2000). Therefore, under 35 U.S.C. §103(c), Ching cannot preclude the patentability of the present invention, and Applicants request this rejection of claims 4, 23, 51, and 62 be withdrawn.

5. *Final remarks*

The Examiner is invited to contact the undersigned patent agent at (713) 934-4065 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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July 22, 2004

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